

THE CLAIMS

1. A method of combining at least one liquid composition with at least one filler material, comprising:
 - providing the filler into a pressurized container having a conduit having an orifice whereby the filler leaves the container through the conduit against gravity;
 - providing the liquid in a container;
 - metering the filler by varying the pressure in the container, the diameter of the orifice of the conduit, or a combination thereof;
 - providing a hose connected to the liquid container and a hose connected to the filler container and to a spray gun assembly whereby to pass the metered filler and liquid; and
 - separately passing the liquid component and the metered filler component through the spray gun assembly, wherein the liquid component and the filler component are sprayed and combine.
2. The method of claim 1 wherein the spray gun assembly comprises a spray gun nozzle having an outer chamber wherein said filler component is passed, said outer chamber circumferentially surrounding an inner chamber wherein said liquid component is passed.
3. The method of claim 1 wherein the liquid is water, solvent, plasticizer, paint, glue, polymer, cement slurry, asphalt emulsion, polymer latex, epoxy, polyester, polyurethane, or methacrylate.
4. The method of claim 1, wherein the filler is sand, glass beads, garnet, aluminum oxide, tungsten carbide, powdered plastics, ceramic spheres, or powdered metals.
5. The method of claim 4 wherein the filler is from about 12 to 100 mesh.
6. The method of claim 1 further comprising adding an additive to the liquid component, said additive is selected from the group consisting of antistatic agents,

blowing agents, delusterants, dye regulating agents, flame retardants, heat stabilizers, light stabilizers, lubricants, pigments, plasticizers and combinations thereof.

7. The method of claim 1 further comprising providing a spacing device inside and at the bottom of the pressurized filler container, wherein said device is connected to the hose for carrying the filler material to the spray gun assembly.

8. An apparatus for combining at least one liquid component with a filler component, whereby to form a sprayable composition, said apparatus comprising: (a) a filler component holding system; (b) a pumping system; (c) a spray gun assembly wherein said liquid and filler components are sprayed separately and simultaneously, intersect and combine.

9. The apparatus of claim 7, wherein said spray gun assembly comprises a spray gun nozzle having an outer chamber whereby said filler component is pumped, said outer chamber circumferentially surrounding an inner chamber whereby said liquid component is pumped.

10. A coating produced according to the method of claim 1.

11. A spray gun nozzle comprising:
a cylindrical housing having an internal cavity through which filler material is blown;
a supporting pipe surrounded by the cylindrical housing;
a static mixer surrounded by the supporting pipe;
a retaining nut having an external male thread and an internal female thread retains both the supporting pipe and the static mixer, the external thread connected to the internal thread of the cylindrical housing and the internal thread connected to a male thread of a manifold of a spray gun.

12. A method of metering a filler material, comprising:

providing the filler into a pressurized container having a conduit having an orifice whereby the filler leaves the container through the conduit;

metering the filler by varying the pressure in the container, the diameter of the orifice, or a combination thereof;

providing a hose connected to the filler container and to a hose assembly whereby to pass the metered filler; and

passing the metered filler component through the hose assembly, wherein the filler component is poured.

13. A method of pretreating at least one filler material prior to combining the filler material to at least one liquid polymer composition, comprising:

providing at least one filler material;

providing at least one liquid polymer composition; and

combining the filler material with a predetermined amount of the polymer composition, whereby to coat the filler material.

14. The method of claim 13, further comprising:

metering the pretreated filler by varying the pressure in the container, the diameter of the orifice of the conduit, or a combination thereof;

providing a hose connected to the liquid container and a hose connected to the filler container and to a spray gun assembly whereby to pass the metered filler and liquid; and

separately passing the liquid component and the metered filler component through the spray gun assembly, wherein the liquid component and the filler component are sprayed and combine.

15. The method of claim 13 wherein the liquid polymer composition is methylene diphenylene isocyanate.

16. The method of claim 13 wherein the filler material is sand.

FOOTNOTES